

WHAT IS CLAIMED IS:

1. A vehicle headlamp apparatus comprising:

left-right deflecting means for deflecting an optical axis
of illumination of a headlamp in a left-and-right direction in
5 correspondence with a steering angle of a vehicle;

vertically deflecting means for deflecting the optical
axis of illumination of said headlamp in a vertical direction;
and

deflection controlling means for effecting the operation
10 of setting the optical axis of said headlamp by said left-right
deflecting means at a time when the optical axis of illumination
of said headlamp is in a state of being oriented in a lower
direction than the horizontal direction by said vertically
deflecting means.

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2. A vehicle headlamp apparatus according to claim 1,
wherein the left-right deflecting means includes a drive motor
which drives the headlamp in the left-and-right direction, and

the deflection controlling means includes a sensing
20 element which outputs pulse signals in response to rotation of
the drive motor, and an up-down counter which counts number of
the pulses.

3. A vehicle head lamp apparatus according to claim

2, wherein the deflection controlling means sets the optical axis of said headlamp based on a rotation range is obtained from a first counting number of the up-down counter when the drive motor is rotated in one direction and a second counting number
5 of the up-down counter when rotated in the opposite direction.

4. A method of setting an optical axis position of a vehicle headlamp apparatus including left-right deflecting means for deflecting an optical axis of illumination of a headlamp
10 in a left-and-right direction in correspondence with a steering angle of a vehicle and vertically deflecting means for deflecting the optical axis of illumination of said headlamp in a vertical direction, the method comprising the steps of:

effecting the operation of setting the optical axis by
15 said left-right deflecting means at a time when the optical axis of illumination of said headlamp is in a state of being oriented in a lower direction than the horizontal direction by said vertically deflecting means at the time of setting the optical axis position of said headlamp to a reference angular position;
20 and

completing the operation of setting the optical axis by said vertically deflecting means after completion of the operation of setting the optical axis by said left-right deflecting means.

5. The method of setting an optical axis position according to claim 4, wherein after starting the operation of said vertically deflecting means, the operation of said
5 left-right deflecting means is started after the lapse of a first predetermined time.

6 The method of setting an optical axis position according to claim 4, wherein after starting the deflecting
10 operation of said vertically deflecting means in a downwardly oriented manner, the deflecting operation of said vertically deflecting means in an upwardly oriented manner is started after the lapse of a second predetermined time.

15 7 The method of setting an optical axis position according to claim 5, wherein after starting the deflecting operation of said vertically deflecting means in a downwardly oriented manner, the deflecting operation of said vertically deflecting means in an upwardly oriented manner is started after
20 the lapse of a second predetermined time.